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Electronic reservation of assistance for persons with reduced mobility

Exchange of messages



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Foreword

An International Railway Solution (IRS) is a document drawn up by consensus and applied on a voluntary basis which aims to facilitate and harmonise railway operation.

IRSs are gradually replacing UIC leaflets.

Members of the International Union of Railways (UIC) participate in the creation of IRSs, of which they benefit in full. Furthermore, marketing to railway stakeholders contributes to the sharing and harmonisation of good practices, in accordance with UIC's primary goal.

While IRSs do not have the force of law, they are created and published in a professional manner and with technical approval on the basis of UIC procedures, and have full technical legitimacy in the railway sector.

The "General application" section constitutes the heart of the IRS and contains the working group's expertise applicable in the broadest manner. The addition of a "Specific application" aims to cover factors specific to a region, a type of service, etc.

Some provisions shall be implemented in all cases to ensure correct application and maintain the system's cohesiveness. Certain operational circumstances require that specific provisions be systematically applied by all users of the document.

For the purposes of understanding, the user acknowledges that the expression of:

- obligation indicates requirements to be respected in order to comply with the expertise expressed in the document (usually "shall");
- recommendation indicates options that are favourable but not essential (usually "should");
- permission indicates options that are recognised but without consequence (usually "may");
- capacity indicates possibilities from a technical standpoint and not permissions or probabilities (usually "can").

Obligation, recommendation and capacity can be expressed in the negative to indicate prohibiting, non-recommendation and incapacity.

If applicable, notably for the purposes of compliance with a UIC approval, passages that are recommended or mandatory for the cohesiveness of the system will be accompanied by the letters "R" and "MCS" respectively.

This IRS reflects the following UIC working group expertise:

Railway experts are participating in the Person with Reduced Mobility Assistance Booking Tool (UIC PRM ABT) working Group under the PASSAGE Group under the supervision of the Passenger Service Group (PSG) Sector within the Global Passenger Forum (GPF).

It integrates in full or in part the following UIC leaflets:

N/A

It complements the following standards:

N/A

The following IRSs constitute a complementary series:

N/A

Executive summary

When a passenger with special needs (Passenger in wheelchair or with vision or hearing or mental disabilities) wish to travel in train for an international journey, all assistance staff in station on his journey should be prepared to help him/her.

IRS 90918-6 describes IT messages to be exchanged between RUs to book assistance for persons with reduced mobility (PRM) at stations. The specification contained in this IRS enable a RU to request assistance for a PRM at a station managed by another RU.

This document is accompanied by XML schema files defining the messages. These schema files are part of the IRS. Future enhancements have to ensure to keep the model definition in the IRS document and the accompanying schema files consistent.

The IRS is accompanied by a XSD scheme file documentation generated from the schema files. This documentation is provided for the convenience of the reader only, the valid specification is defined in the schema files.

This document does not cover the processes needed for organizing the assistance between the different RU organizations involved.

UIC implemented a web application called UIC PRM ABT. It is in production since November 2010. In 2021, 17 railways companies CD, CFL, DB, DSB, Eurostar, FS, MAV, NS, OBB, PKP, RENFE, SBB, SNCB, SNCF, Thalys, Trafikverket and ZSSK, are using the system.

The UIC PRM ABT XML webservice link is in production with SNCB since May 25th, 2011 and with NS since October 2021.

It integrates in full or in part the following UIC leaflets:

Leaflet 918-6

It complements the following standards:

N/A

Field of application

This IRS applies to the drafting of IRSs.

It illustrates and describes the constituent elements.

It provides writers with a comprehensive example and precise explanations.

This IRS contains a structure and standard texts, descriptions of sections and points, and practical tips.

It does not include advanced rules relating to the format (font and size of characters, bibliographic rules, etc.). It is up to the editors to ensure the document's formal compliance before publication.

Furthermore, this IRS is not concerned with project management or organisation of the working group.

Abbreviations and Symbols

ABT	Assistance Booking Tool
PRM	Person with reduced mobility
PRR	Passenger Rights Regulation
RU	Railway Undertaking
UML	Unified Modeling Language
XML	Extensible Markup Language
XSD	XML Schema Definition

Electronic reservation of assistance for persons with reduced mobility - Exchange of messages

General Application

1 – Overview

The specification defines messages and functions to be used for requesting the availability of assistance and to book assistance. The messages support an automatic allocation system and an allocation system including manual steps for allocation of assistance. Both implementation models are fully interoperable.

The leaflet consists of the following parts:

- Stakeholder
There all systems and roles involved in the booking of assistance are defined if they are required for the booking functionality specified in the leaflet.
- Use Cases
All Use Cases supported by the specification are listed.
- Structural Model
The structural model provides a data model for all information object involved. The structural model is the base reference for the exchange of information defined by the messages.
- Functional Model
The functional model defines the scenarios as sequence diagrams and links the functions with the messages used.
- Message definition
The message definition referees to the xml schema files and the documentation generated from the schemas. This section specifies additionally the versioning of the messages.

The diagrams used in this document follow the UML 2 specification ([see Abbreviations and Symbols - page 5](#)).